

AN ANALYSIS OF RECIDIVISM RATES  
AMONG RESIDENTS RELEASED FROM MASSACHUSETTS  
CORRECTIONAL INSTITUTIONS DURING THE YEAR 1973

Prepared by:

Daniel P. LeClair, Ph.D.  
Research Specialist

Massachusetts Department of Correction

Frank A. Hall  
Commissioner

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ABSTRACT

*The present study consists of an analysis of rates of recidivism for individuals released from Massachusetts' State Correctional Institutions. The particular population upon which the analysis was conducted consisted of all such releases in the year 1973.*

*Several striking findings emerged from the study that we believe have wide range theoretical and, more importantly, administrative policy implications.*

*First, it is clear that a consistent reduction in recidivistic behavior is occurring in Massachusetts. For releases in the year 1966, the mean rate of recidivism was 30%; for 1971, it was 25%; for 1972, 22%; and for 1973, 19%. This trend, however, is not peculiar to the state of Massachusetts. For example, Martinson and Wilks (October, 1976) have recently presented evidence that the same trend is occurring nationally.*

*Secondly, the study firmly demonstrates that participation in the Furlough Program is the most important variable in accounting for the reduction of recidivism rates that has occurred in Massachusetts. When the selection factor was controlled for, the relationship held as strongly.*

*Thirdly, the study found that participation in pre-release programs prior to reintroduction to community life, led to the lowest rate of recidivism.*

*Fourthly, related to the finding discussed above, analyses revealed that individuals released from prison directly from medium or minimum security institutions (which includes pre-release centers) had significantly lower rates of recidivism than did those individuals released directly from a maximum security institution. This finding, also documented in previous Departmental recidivism studies, suggest a reintegrative or rehabilitative quality in the movement from maximum to medium to minimum security levels, as opposed to an abrupt release directly from a maximum security institution.*

*The above findings provide striking support for the recently enacted community-based correctional network of programs in Massachusetts: Pre-Release Centers, Halfway Houses, Work and Education Release Programs, Co-Educational Institutions, and most importantly, the Furlough Program.*

(ii)

Two other aspects of the present study include: (1) comparative recidivism figures for both a one and a two year follow-up period; and (2) a profile of high and low recidivism risk potentials derived from a series of personal background and criminal history variables on each member of the population.

The profile portion of the analysis revealed a further important finding. It was found that the category criminal career pattern was the strongest indicator of high/low recidivism risk potential. Those individuals found to be deeply embedded in a criminal career consistently had the highest rates of recidivism. This finding is important in relation to the newly emerging interest in career criminal programming.

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Far too many individuals participated in this study over the past 12 months to cite all individually. My appreciation for their help and support is great. I would, however, like to mention at least four areas of assistance.

First, Miranda Mucciante served as project assistant throughout the operational stage of the report. She drew the sample, trained the data collectors, and validated the recidivism variables. Her precise - delightfully compulsive - and dedicated work has provided the comfort of knowing that the data utilized in the analyses was of the highest quality. Without Ms. Mucciante's assistance, the report would not have reached fruition.

Secondly, I would like to thank the Correction and Parole Management Information System's participation in the project. Furlough History, Personal Background Characteristics, and Criminal History variables were derived and linked from their data base. In addition, the many coders that were needed to collect the recidivism variables was provided by this unit.

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## INTRODUCTION

With the passage of the Correctional Reform Act of 1972, a wide variety of programmatic changes were introduced to the Massachusetts Department of Correction. The Act allowed for the creation of pre-release centers, halfway houses and a home furlough program. In addition, it provided for the expansion of work and education release programs. Coordinated with the introduction of the various reintegration programs was an extensive effort to develop and carry out careful research evaluations for each of the individual components within the network. The purposes of the research evaluations were twofold: first, research evaluations were designed to provide operational feedback for program administrators; secondly, research evaluations were designed to measure the rehabilitative effectiveness of the programs as correctional devices.

As part of this continuing effort of research evaluation the following study seeks to present a broad overview of rates of recidivism for the correctional system as a whole. An attempt is made to provide a framework through which individual programmatic components can be assessed. The report contains data describing the background characteristics and recidivism rates for all individuals released from Massachusetts Correctional Institutions in the year 1973. It also contains a series of comparisons between the 1973 material and the recidivism material of former years. Three aspects of the present report allow for new insights into the post-release patterns.

First, we were able to obtain a measure of the Furlough Program as a correctional device in terms of recidivism reduction. We believe that this may be the first data of this kind to be available nationally.

Second, the data contained both a one and a two year follow-up period. Recent recidivism reports contain a one year follow-up period only. A two year follow-up has not been carried out since the year 1966.

Third, recidivism rates for pre-release centers was included as a separate category of the total releasee population.

The adult correctional institutions included in the present study are: MCI's Walpole, Concord, Norfolk, Framingham and the three Forestry Camps (MCI's Monroe, Warwick, and Plymouth). In addition, two pre-release centers, Boston State and Shirley are included.<sup>2</sup> Since MCI-Framingham includes both males and females in its population, this institution's releasee population was sub-divided by sex.

Definition of Recidivism:

A recidivist was defined as any subject who was returned to a Federal or state correctional institution or to a County House of Correction or Jail for 30 days or more.

Follow-up Period:

The study was divided into two sections in order to provide two separate follow-up periods. The first follow-up period was one year from the date of the subject's release from prison. Each individual was therefore followed in the community for one full year. The second follow-up period was two years from the date of the subject's release from prison. Similarly, each individual was followed in the community for two full years.

Variables Collected:

For the analyses that follow in this report, five categories of variables were collected: Commitment Variables, Personal Background Characteristics Variables, Criminal History Variables, Furlough Variables, and Recidivism Variables. A specific listing of variables is given in Appendix I.

Data was primarily derived from the computerized data base developed by the Correction and Parole Management Information System. Additional data was collected from the files of the Department of Correction, the Parole Board, and the Board of Probation. All data was analyzed on the Massachusetts State College Computer Network.

FINDINGS: ONE YEAR FOLLOW-UP

Number of Releases:

A total of 966 individuals were released from Massachusetts Correctional Institutions during the year 1973. Of this number, 878 individuals were male and 88 were female. The total number of releases represents a decrease over previous years. For example, the number of releases in 1973 represents 38% decrease in the number of releases over the previous year. This point is illustrated in Table I, below:

TABLE I

NUMBER OF RELEASES FROM MASSACHUSETTS STATE CORRECTIONAL INSTITUTIONS  
IN THE YEARS 1966, 1971, 1972 AND 1973

Year	Total Number of Releases
1966	1,036
1971	1,107
1972	1,550
1973	966

Differential Recidivism Rates by Releasing Institution:

Of the 966 individuals released from Massachusetts Correctional Institutions in 1973, 780 (81%) were not returned to a correctional institution within one year of their release. The remaining 186 individuals (19%) were reincarcerated for at least 30 days within one year of their release. Thus, the overall recidivism rate with a one year follow-up period was 19%.

A breakdown of the recidivism rates for the specific releasing institutions is summarized below in Table II:

TABLE II

DIFFERENTIAL RECIDIVISM RATES BY INSTITUTION  
OF RELEASE: ONE YEAR FOLLOW-UP

Institution of Release	Number of Releases	Percent of Total Releases	Recidivism Rate
Walpole	132	(14)	21%
Concord	332	(34)	26%
Norfolk	211	(22)	14%
Forestry	70	( 7)	14%
Pre-Release	109	(11)	12%
Framingham Men	24	( 3)	17%
Framingham Women	88	( 9)	17%
TOTAL	966	(100)	19%



As can be seen from Table II, higher rates of recidivism occurred for individuals released from MCI's Concord and Walpole, and lower rates of recidivism occurred for individuals released from MCI's Norfolk, Forestry Camps, and Pre-Release Centers. The recidivism rates for MCI-Framingham (a co-ed facility) were slightly below the mean rate. It is interesting to note that both males and females released from MCI-Framingham had the same recidivism rate.<sup>3</sup>

In terms of statistical significance, the recidivism rate for MCI-Concord was significantly higher than the total releasee population; and the recidivism rates for MCI-Norfolk and the Pre-Release centers were significantly lower than the total releasee population. The difference for MCI's Walpole, Framingham, and Forestry Camps were not statistically significant.

Recidivism Rate Comparisons with Recent Years:

When the overall recidivism rate for releases in 1973 is compared to the rates in previous years, one finds that a pattern, first identified in the releases in 1971, continues to occur.<sup>4</sup> Specifically, a significant drop in recidivism is evident. The overall recidivism rate for releases from Massachusetts Correctional Institutions was 30% in 1966. With the same definition of recidivism and with the same follow-up period of one year, the recidivism rate was 25% in 1971; 22% in 1972; and 19% in 1973. This material is summarized and broken down by individual institutions, in Table III below:

TABLE III

COMPARATIVE RECIDIVISM RATES FOR YEARS 1966, 1971, 1972 & 1973

Year	Concord	Walpole	Norfolk	Prison Camps	Fra- mingham	Pre- Release	TOTAL
1966	30%	33%	28%	27%	32%	-	30%
1971	28%	27%	18%	14%	29%	-	25%
1972	27%	21%	15%	14%	18%	-	22%
1973	26%	21%	14%	14%	17%	12%	19%

Specific Category of Recidivism for Releases in the Year 1973:

It is important to examine the specific categories of return to prison covered under the term recidivism. For example, it is important to note that 65 individuals or 35% of the total 186 recidivists in the sample were re-incarcerated for reason of a technical infraction of their parole conditions. They did not have a new arrest associated with their parole violation. Seventy-five individuals, or 40% of the total 186 recidivists, were re-incarcerated because a new arrest was associated with their parole violation; although at the time of their re-incarceration, they may not have been tried for this new arrest. Only 46 of the 186 recidivists (25%) were re-incarcerated as a result of a new conviction; i.e., received a new sentence from the court. These figures are summarized in Table IV below:

TABLE IV  
RECIDIVISM BREAKDOWN FOR RELEASES IN 1973 BY CATEGORY OF RETURN

	Walpole N %	Concord N %	Norfolk N %	Forestry N %	Pre-Release N %	Framingham Men N %	Framingham Women N %	TOTAL N %
Non-Recidivists	104 (79)	245 (74)	182 (86)	60 (86)	96 (88)	20 (83)	73 (83)	780 (81)
Recidivists								
Parole Violation, Technical	11 (8)	21 (6)	15 (7)	6 (9)	4 (4)	0 (0)	8 (9)	65 (7)
Parole Violation, New Arrest	10 (8)	47 (14)	13 (6)	2 (3)	8 (7)	4 (17)	1 (1)	85 (9)
New Court Commitments	7 (5)	19 (6)	1 (1)	2 (3)	1 (1)	0 (0)	6 (7)	36 (4)
TOTAL	132 (100)	332 (100)	211 (100)	70 (100)	109 (100)	24 (100)	88 (100)	966 (100)

Of the 186 recidivists in the sample, 177 (95%) were parolees and 9 (5%) were discharges. When the discharges are excluded from the sample, the tabulation of reason of return is as follows:

TABLE V  
BREAKDOWN OF RECIDIVISM FOR RELEASES  
IN 1973 BY CATEGORY OF RETURN, PAROLEES ONLY

Category	Number	Percent
Non-Recidivists	696	(80)
Recidivists		
Parole Violators, Technical	65	( 7)
Parole Violators, New Arrest	85	(10)
Returned on New Commitment	27	( 3)
<u>TOTAL</u>	873	(100)

When we compare these figures presented in Tables IV and V above with the outcomes in previous years, we find that a considerable shift occurs between the various categories of return from year to year. For example, when we compare the category of return for the releases in 1972 with the category of return for releases in 1971 the following occurs:

- (1) A lower proportion of returns for reason of a technical violation of their parole conditions occurred for the 1972 cohort. Whereas 22% of the recidivists in the 1972 releasee cohort were returned for reason a technical violation of parole, 43% of the 1971 releasee cohort were returned for this reason.

- (2) A higher proportion of returns for reason of a new arrest associated with their parole revocation occurred for 1972 releasee cohort. Whereas 55% of the recidivists in the 1972 releasee cohort were returned for reason of a new arrest associated with their parole revocation, 47% of the 1971 releasee cohort were returned for this reason.
- (3) A higher proportion of returns for reason of receiving a new commitment from the courts occurred for the 1972 releasee cohort. Whereas 23% of the recidivists in the 1972 releasee cohort were returned on a new commitment from the courts, 10% of the 1971 releasee cohort were returned for this reason.<sup>5</sup>

What this means is that individuals returned to prison in the 1972 cohort were less apt to be returned for reason of technical violation of their parole. Instead, the reason of return was more apt to be for reason of a new arrest or because they received a new court commitment.

The same pattern, though less pronounced, occurs when we compare the 1972 releasee cohort with the 1966 releasee cohort. When we look at the figures for the 1973 cohort, however, we find: (1) that the proportion of returns for reason of a technical violation of parole has slightly increased, (2) that the proportion of returns for reason of a parole violation associated with a new arrest has decreased; and (3) that the proportion of returns for reason of a new court commitment has decreased. These results are presented in Table VI below:

TABLE VI

BREAKDOWN OF RECIDIVISM BY CATEGORY OF RETURN FOR  
YEARS 1966, 1971, 1972 AND 1973

	1966*		1971		1972		1973	
	N	%	N	%	N	%	N	%
Non-Recidivists	648	(70)	835	(75)	1204	(78)	780	(81)
Recidivists:								
Parole Violation, Technical	93	(10)	118	(11)	76	( 5)	65	( 7)
Parole Violation, New Arrest	96	(11)	128	(12)	190	(12)	85	( 9)
New Commitments	81	( 9)	26	( 2)	80	( 5)	36	( 4)
<u>TOTAL</u>	918	(100)	1107	(100)	1550	(100)	966	(100)

\* Data for MCI-Framingham excluded from 1966 figures.

Recidivism Rates by Committing Institution:

In the Massachusetts criminal justice system, the courts make direct commitments to three institutions. Women are committed to MCI-Framingham, and men are committed to either MCI-Concord, or MCI-Walpole. In the case of men sentenced to MCI-Concord, the judge does not fix a specific term. The individual is sentenced to the authority of the superintendent without a minimum sentence and the maximum sentence is established by statute. Traditionally, Concord sentences are for individuals with less lengthy criminal histories and, therefore, tend to be younger offenders. In the case of men sentenced to MCI-Walpole, the judge must fix both a minimum and a maximum term (except for life sentences and sentences for habitual offenders). The minimum must not be for less than two and a half years; the maximum not more than that established by statute.

Men are not committed to either MCI-Norfolk or Forestry Camps directly by the courts. Instead, they are received on transfer from MCI's Walpole and Concord after having been carefully screened as suitable for a medium security status.

The releasee population for the year 1973 was analyzed in terms of the specific institution to which each individual was originally committed. Of the 966 releases in the population, 88 (9%) individuals had been originally committed to MCI-Framingham and had a recidivism rate of 17%; 478 (50%) had been originally committed to MCI-Concord and had a recidivism rate of 24%; and 400 (41%) had been originally committed to MCI-Walpole and had a recidivism rate of 14%. These results are summarized in Table VII below:

TABLE VII

DIFFERENTIAL RECIDIVISM RATE BY COMMITTING INSTITUTION:  
1973 RELEASES

Committing Institution	Number	Percent	Recidivism Rate
MCI Walpole	400	(41)	14%
MCI Concord	478	(50)	24%
MCI Framingham	88	( 9)	17%
TOTAL	966	(100)	19%

When the results, as presented in Table VII above, are compared to the experience in previous years (see Table VIII below) we see that MCI-Concord commitments consistently have higher recidivism rates. We also see that a continued downward trend occurs for all committing institutions.

TABLE VIII  
COMPARATIVE RECIDIVISM RATES BY  
COMMITTING INSTITUTION FOR YEARS 1966-73

<u>Year</u>	<u>Walpole Commitments</u>	<u>Concord Commitments</u>	<u>Framingham Commitments</u>	<u>TOTAL</u>
1966	27%	35%	32%	30%
1971	19%	29%	29%	25%
1972	17%	28%	18%	22%
1973	14%	24%	17%	19%

Differential Recidivism Rates for Committing Institutions by  
Institution of Release:

As part of an evaluation of rates of recidivism for releases from Massachusetts Correctional Institutions in 1971, a report was issued in May of 1975 which documented an interesting trend concerning Walpole commitments.<sup>6</sup> It was reported that when the 1971 releasee population was analyzed in terms of the sample members' original commitment institution crosstabulated by his institution of release, a particular pattern existed for Walpole commitments. Specifically, analyses revealed that for individuals originally committed to MCI-Walpole, differential rates of recidivism occurred in accordance with the particular institution from which they were released. Walpole commitments who were transferred to and subsequently released from other Massachusetts Correctional Institutions had significantly lower rates of recidivism than those who remained at MCI-Walpole (or those who were transferred from MCI-Walpole but who were subsequently returned and released from MCI-Walpole).

The author of the report hypothesized that the differential rates of recidivism for the MCI-Walpole commitments by institution of release might be accounted for by either of two explanations: (1) low recidivist risks may have been selected for transfer to the lower custody institutions; or (2) there is a reintegrative or rehabilitative quality in the movement from maximum to medium and to minimum security levels as opposed to an abrupt release directly from a maximum security institution to the street.



In order to test the above hypotheses, the Massachusetts Department of Correction's Research Unit conducted a separate study that attempted to determine if either of the two explanations was, in fact, correct.<sup>7</sup> In this study, Base Expectancy Tables were developed and applied to the portion of the MCI-Walpole commitments in the sample that were transferred to and released from MCI's Norfolk, and Forestry Camps to determine whether or not lower recidivist risks groups were selected disproportionately.

After carrying out the study, the author concludes that evidence supports the hypothesis that there is a reintegrative or rehabilitative quality in the movement from maximum to medium and to minimum security levels as opposed to an abrupt release directly from a maximum security institution.

These findings were further substantiated by the data for the releases in the year 1972.<sup>8</sup> They are also substantiated by the 1973 data presented in this report. Specifically, for the 1973 data, analyses revealed that for individuals originally committed to MCI-Walpole, differential rates of recidivism occurred in accordance with the particular institution from which they were released. Individuals who were originally committed to Walpole and then released to the street directly from a maximum security institution (MCI's Walpole and Concord) had significantly higher rates of recidivism than did individuals originally committed to Walpole but subsequently released to the street from a medium or minimum security institution (MCI's Norfolk, Forestry, Framingham and Pre-Release Centers). This relationship was found to be statistically significant.<sup>9</sup> These figures are summarized in Tables IX and X below:

TABLE IX

RECIDIVISM RATES OF WALPOLE COMMITMENTS  
BY INSTITUTION OF RELEASE, 1973 POPULATION

Releasing Institution	Number	Percent	Recidivism Rate
MCI Walpole	130	(32)	22%
MCI Concord	13	( 3)	23%
MCI Norfolk	161	(40)	9%
MCI Framingham (male section)	5	( 1)	0%
MCI Forestry	64	(16)	14%
Pre-Release Centers	27	( 7)	7%
TOTAL	400	(100)	14%

TABLE X

RECIDIVISM RATES OF WALPOLE COMMITMENTS  
BY SECURITY LEVEL OF INSTITUTION OF RELEASE

Security Grouping	Number	Percent	Recidivism Rate
Released from a Maximum Security Institution	143	(36)	22%
Released from a Medium or Minimum Security Institution	257	(64)	10%
TOTAL	400	(100)	14%

A breakdown of MCI-Concord commitments by institution of release is presented in Tables XI and XII below. Though variation in recidivism rates occurred, only one of these differences was statistically significant.<sup>10</sup> Specifically, individuals originally committed to MCI-Concord but subsequently transferred to and released from pre-release centers had significantly lower rates of recidivism than those released from other institutions. Concord commitments released from pre-release centers had a recidivism rate of 13%, whereas Concord commitments released from other institutions had a recidivism rate of 26%.

TABLE XI

RECIDIVISM RATE OF CONCORD COMMITMENTS  
BY INSTITUTION OF RELEASE, 1973 POPULATION

Releasing Institution	Number	Percent	Recidivism Rate
MCI Concord	319	(67)	27%
MCI Walpole	2	( 0)	0%
MCI Norfolk	50	(11)	28%
MCI Framingham	19	( 4)	21%
MCI Forestry	6	( 1)	17%
MCI Shirley	50	(11)	10%
MCI Boston State	32	( 7)	6%
TOTAL	478	(100)	24%

TABLE XII

RECIDIVISM RATES FOR CONCORD COMMITMENTS  
BY SECURITY LEVEL OF INSTITUTION OF RELEASE

Security Grouping	Number	Percent	Recidivism Rate
Concord Commitments, Released from Maximum Security Institution	321	(67)	26%
Concord Commitments, Released from Medium or Minimum Security Institutions	157	(33)	19%
TOTAL	478	(100)	24%

Recidivism Rates by Type of Release:

The 1973 releasee cohort was next analyzed in terms of differential recidivism rates by category of type of release. The sample was sub-divided into the two categories of release: (1) parole, and (2) discharge. From Table XIII, below, it can be seen that for all releasing institutions individuals who were released on parole had significantly higher rates of recidivism. than individuals who were released on discharge. 11

One clear reason why it would be expected for individuals receiving a discharge would have lower rates of recidivism is that such individuals would not be returned for parole violations since they are not on parole status. Discharges may only be returned for reason of receiving a new sentence on a new offense.

TABLE XIII

RECIDIVISM RATE OF THE 1973 RELEASEE POPULATION  
BY TYPE OF RELEASE: ONE YEAR FOLLOW-UP

Releasing Institution	Parolees			Discharges			TOTAL Sample		
	N	%	RR	N	%	RR	N	%	RR
MCI Walpole	111	(13)	24%	21	(23)	5%	132	(14)	21%
MCI Concord	304	(35)	28%	28	(30)	11%	332	(34)	26%
MCI Norfolk	194	(22)	14%	17	(18)	6%	211	(22)	14%
MCI Forestry Camps	69	( 8)	15%	1	( 1)	0%	70	( 7)	14%
Pre-Release Centers	106	(12)	12%	3	( 3)	0%	109	(11)	12%
Framingham Men	24	( 3)	17%	0	( 0)	0%	24	( 2)	17%
Framingham Women	65	( 7)	17%	23	(25)	17%	88	( 9)	17%
<b>TOTAL</b>	<b>873</b>	<b>(100)</b>	<b>20%</b>	<b>93</b>	<b>(100)</b>	<b>10%</b>	<b>966</b>	<b>(100)</b>	<b>19%</b>

FURLOUGH PARTICIPATION

The 1973 data included participation in the Furlough Program as a variable to be analyzed in relation to recidivist behavior. Thus, for the first time, we are able to obtain a measure of the effectiveness of the Furlough Program as a correctional device in terms of recidivism reduction. It was found that those individuals who had experienced one or more furloughs prior to their release from prison had significantly lower rates of recidivism than did individuals who had not experienced a furlough prior to release. 12

Of the total number of individuals released from prison in the year 1973, 296 (31%) had not received a furlough while incarcerated. Their recidivism rate was 25%. By contrast, the 675 (69%) individuals who did experience a furlough while incarcerated had a recidivism rate of 17%. Those individuals who had furloughs had significantly lower recidivism rates. These results are summarized below in Table XIV.

TABLE XIV

RECIDIVISM RATE BROKEN DOWN  
BY PARTICIPATION IN FURLOUGH PROGRAM

	Number	Percent	Recidivism Rate
Did not receive a furlough	296	(31)	25%
Received a furlough	670	(69)	17%
TOTAL SAMPLE	966	(100)	19%

When the furlough variable is broken down by the specific institution of release, it was discovered that MCI's Walpole and Norfolk were most affected by the furlough program. The only institution, however, in which individuals having received a furlough did not have a lower recidivism rate than those receiving a furlough was the women's section of MCI-Framingham. These results are summarized below in Table XV:

TABLE XV

RECIDIVISM RATE OF INDIVIDUALS RECEIVING A FURLOUGH  
COMPARED TO RECIDIVISM RATE OF INDIVIDUALS NOT RECEIVING A FURLOUGH

	WALPOLE		CONCORD		NORFOLK		FORESTRY CAMP		PRE- RELEASE CENTERS		FRAM- INGHAM MEN		FRAM- INGHAM WOMEN		TOTAL SAMPLE	
	N	RR*	N	RR	N	RR	N	RR	N	RR	N	RR	N	RR	N	RR
Recidivism Rate of Individuals Who Had Not Re- ceived a Furlough	97	25%	121	28%	46	26%	1	0%	2	50%	1	0%	28	14%	296	25%
Recidivism Rate of Individuals Who Had Received a Furlough	35	11%	211	25%	165	10%	69	15%	107	11%	23	17%	60	18%	670	17%
Recidivism Rate of Total Population	132	21%	332	26%	211	14%	70	14%	109	12%	24	17%	88	17%	966	19%

\* RR = Recidivism Rate

In interpreting these results, it is important to realize that the selection process in granting furloughs to individuals may have worked in such a way that low recidivism risks were chosen to receive furloughs and high risks were excluded. Therefore, to test the validity of the finding that having received a furlough reduces the incidence of recidivist behavior, a test for possible selection biases is necessary. This was accomplished through the use of Base Expectancy Prediction Tables through which an expected recidivism rate is calculated. The Base Expectancy Table was constructed on the population of inmates released from Massachusetts Correctional Institutions in the year 1971. This population was chosen because it represents a period in time just prior to the introduction of the furlough program (as well as pre-release and other community correctional programs) in Massachusetts. Thus, no one in this population had experienced a furlough.

Because the Department generally calculates Base Expectancy Tables separately for males and females, and because the furlough effect on the male population was in the opposite direction as the female population; we decided to apply the Base Expectancy test to the males and females separately. However, the very small size of the female population (only 28 females did not receive a furlough) made the validity of using Base Expectancy Tables questionable. We therefore decided to test the selection factor on the male population only.

Once constructed, the Base Expectancy Table was first used to calculate the Expected Recidivism Rate of the Total Male Releasee Population for the year 1973. Then this population was divided into two portions: a group consisting of all the individuals who received one or more furloughs; and a group consisting of all individuals who did not receive a furlough. Base Expectancy Rates were then calculated for each of these sub-groups. These calculations resulted in the following Expected Rates of Recidivism:

<u>GROUP</u>		<u>EXPECTED RATE OF RECIDIVISM</u>	<u>ACTUAL RATE OF RECIDIVISM</u>
I	All males released in 1973 who received a furlough	25%	16%
II	All males released in 1973 who did not receive a furlough	27%	27%
III	Total Group of All Males released in 1973	26%	19%

Several striking generalizations emerge from the above findings. First, the prediction device revealed that a selection bias had not, in fact, occurred. Individuals experiencing a furlough had an expected recidivism rate of 25%, individuals not receiving a furlough had a recidivism rate of 27%. The difference between these two figures are not statistically significant.

Secondly, it is extremely important to note that the expected recidivism rate and the actual recidivism rate for those individuals who did not receive a furlough was the same! The prediction device projected that 27% of the 1973 male releases who had not experienced a furlough would recidivate. In fact, 27% of that sample did recidivate!

Thirdly, it is extremely important to note that whereas the prediction device projected that 25% of the 1973 male releases who had received a furlough would recidivate, only 16% recidivated. This difference between the expected recidivism rate (25%) and the actual recidivism rate (16%) is highly significant.

*We therefore conclude that participation in the Furlough Program in Massachusetts significantly reduces the chances that an individual will recidivate. Our analysis indicates that the reduction in recidivism is due to the impact of the Furlough Program and not simply to the types of inmates who were selected for furloughs.*

*We further conclude that the reduction in recidivism that has been recently occurring in Massachusetts, as documented earlier in this report, has been largely the result of the introduction of the Furlough Program and other community correctional programs introduced in Massachusetts.*

The above findings are clear, and highly statistically significant. 13



VARIABLES FOUND TO DISTINGUISH  
BETWEEN RECIDIVISTS AND NON-RECIDIVISTS

As the final portion of the one year follow-up section of the report, analyses focused on the identification of specific personal background to criminal history variables that distinguish between individuals who recidivated and those who did not. All of the variables collected for the recidivism analyses were dichotomized so as to determine high and low recidivism risk categories. (For a list of the variables utilized in the analysis see Appendix I of this report) Only those variables that produced statistically significant differences between high and low recidivism risk groups were selected for discussions that follow.

Eight categories of variables were found to distinguish between the incidence of recidivism and non-recidivism. These are summarized in the following outline:

- I. Marital Status
- II. Prior Military History
- III. Education
- IV. Employment
- V. History of Drug Use
- VI. Criminal Career Pattern
  - (1) Number of Prior Court Appearances
  - (2) Number of Prior Court Appearances for Property Offenses
  - (3) Juvenile Incarceration
  - (4) Prior State or Federal Incarcerations
  - (5) Age at First Arrest
- VII. Age at Incarceration
- VIII. Type of Offense

Individuals who were married at the time of incarceration had significantly lower recidivism rates when released than those not married. Whereas those who were married at the time of incarceration had a recidivism rate of 12%, those not married had a recidivism rate of 22%.

Individuals who had previously served in the armed services had significantly lower recidivism rates than those who had not experienced military service. For those individuals who had served in the armed services a recidivism rate of 12% occurred; for those who had not, a recidivism rate of 21% occurred.

In terms of the variable of Educational Attainment, it was found that those individuals who had completed at least 10 grades of formal education lower recidivism rates occurred. Whereas the recidivism rate for individuals who had completed at least the 10th grade was 15%, the recidivism rate for those who had not was 22%.

Individuals who had worked at any one job for longer than one year prior to their incarceration had disproportionately lower rates of recidivism than individuals who had not held a job for at least one year. Whereas those who had held a job for at least one year had a recidivism rate of 12%, those who had not done so had a recidivism rate of 23%.

Whether or not an individual had a known history of drug use influenced the rate of recidivism. For those individuals with a known history of drug use a recidivism rate of 25% occurred; for those individuals without a known history of drug use a recidivism rate of 14% occurred. Thus, a known history of drug use is associated with higher recidivism rates.

The category criminal career pattern seemed to reveal the strongest indicator of high and low recidivism risk. Those individuals deeply embedded in a criminal career consistently had the highest rates of recidivism. This was measured by five sub-categories. First, individuals who had longer records as measured by prior court appearances were higher recidivists. Those who had six or more prior court appearances had a recidivism rate of 22%; those who had 5 or less had a recidivism rate of 11%.

Secondly, individuals whose prior court records contained a larger number of property offenses had higher rates of recidivism. Whereas individuals who had 2 or more prior court appearances for property offenses had a recidivism rate of 23%, those with only one or none had a recidivism rate of 9%.

Thirdly, if an individual began his criminal career as a juvenile and served a juvenile incarceration he had a higher risk of recidivating. This was illustrated by the fact that those individuals who had experienced at least one juvenile incarceration had a recidivism rate of 28%; those who had not had a recidivism rate of 15%.

Fourthly, the fact that an individual had previously served one or more prior state or Federal incarcerations increased his chances of recidivating. Those previously incarcerated in State or Federal prisons had a recidivism rate of 29% as compared to a rate of 11%.

The measure in this category was Age at First Arrest. Those individuals who began their officially recorded criminal careers at the age of 17 or younger had a recidivism rate of 23%, whereas those who began their criminal careers after the age of 18 had a recidivism rate of 13%.

When all these measures of criminal career are added together it becomes evident that the length and seriousness of the criminal career clearly delineates a high risk recidivism potential.

The variable Age at Time of Incarceration clearly points to the fact that the younger offender is the higher recidivism risk. Whereas the recidivism rate for individuals who were 19 or older at the time of the present incarceration was 17%; the recidivism rate for those who were 18 or younger was 29%. The occurrence largely explains the high rate of recidivism for Concord commitments. It is Concord that most younger offenders are sentenced to by the courts.

The final category was type of offense. Individuals originally committed for Murder I, Murder II, Manslaughter or Rape had the lowest recidivism risk potential. Property offenders, Drug Violation offenders, and offenders sentenced for escaping from a previous sentence had the higher recidivism risk potential. These figures are summarized below in Table XVI.

TABLE XVI  
DIFFERENTIAL RECIDIVISM RATES  
BY TYPE OF OFFENSE

Offense	Number	Recidivism Rate
Murder I	3	0%
Murder II	11	0%
Manslaughter	43	7%
Armed Robbery	231	17%
Other Person Offenses	163	18%
Rape	20	5%
Other Sex Offenses	33	18%
Burglary	110	23%
Other Property	135	25%
Escape	15	40%
Narcotics	155	20%
Other	47	17%
<u>TOTAL</u>	966	19%

A breakdown of these variables, their recidivism rates and the statistical test of significance is contained in Appendix II.

TWO YEAR RECIDIVISM FOLLOW-UP

The same data discussed above was next analyzed in terms of a two year follow-up period. Of the 966 individuals who were released in 1973, 677 (70%) were not returned to a correctional institution within two years of their release. The remaining 289 individuals (30%) were reincarcerated for at least 30 days within two years of their release. Thus, the overall recidivism rate with a two year follow-up period was 30%.

A breakdown of the Recidivism Rates for individual institutions is summarized below as Table XVII.

TABLE XVII  
RECIDIVISM RATES, INSTITUTION OF RELEASE  
TWO YEAR FOLLOW-UP PERIOD

Institution	Number of Releases	Recidivism Rate
Walpole	132	33%
Concord	332	39%
Norfolk	211	23%
Forestry	70	29%
Pre-Release	109	18%
Framingham Women	88	24%
Framingham Men	24	21%
TOTAL	966	30%

The last time that a two year recidivism follow-up report was done by the Department was for the releases in the year 1966. When we compare the 1973 figures with 1966, we find that a considerable reduction of recidivism is found to have occurred. This pattern is summarized in Table XVIII below:

TABLE XVIII

COMPARATIVE RECIDIVISM RATES FOR YEARS  
1966 AND 1973: TWO YEAR FOLLOW-UP PERIOD

YEAR	CONCORD	WALPOLE	NORFOLK	PRISON CAMPS	PRE- RELEASE	FRA- MINGHAM	TOTAL
1966	45%	50%	41%	34%	-	-	42%
1973	40%	33%	23%	29%	18%	23%	30%

When looking at participation in the Furlough Program as a variable in recidivistic behavior, the same pattern found in the one year follow-up period was further substantiated in the two year follow-up. Of the 966 individuals released in 1973, 296 (31%) had not had a furlough. Their recidivism rate in the two year follow-up was 39%. Of the 670 individuals released in 1973 (69%) who had had a furlough, 26% recidivated. Thus, again, we see that a rehabilitative effect of the Furlough Program exists.

TABLE XIX

RECIDIVISM RATE OF INDIVIDUALS RECEIVING A FURLOUGH  
 COMPARED TO RECIDIVISM RATE OF INDIVIDUALS NOT RECEIVING  
 A FURLOUGH: TWO YEAR FOLLOW-UP

	WALPOLE		CONCORD		NORFOLK		FORESTRY		PRE- RELEASE CENTERS		FRA- MINGHAM MEN		FRA- MINGHAM WOMEN		TOTAL SAMPLE	
	N	RR*	N	RR	N	RR	N	RR	N	RR	N	RR	N	RR	N	RR
Recidivism Rate of Individuals Who Had Not Received a Furlough	97	38%	121	42%	46	37%	1	100%	2	100%	1	0%	28	20%	296	39%
Recidivism Rate of Individuals Who Had Received a Furlough	35	17%	211	38%	165	19%	69	28%	107	17%	23	22%	60	25%	670	26%
Recidivism Rate of Total Pop- ulation	132	33%	332	40%	211	23%	70	29%	109	18%	24	21%	88	24%	966	30%

\* RR = Recidivism Rate

Further analyses of the two-year follow-up findings will occur in a separate report. In general, patterns discovered in the one-year follow-up were further substantiated in the two year follow-up.



## DISCUSSION

We believe that the findings cited in this report have wide range theoretical and policy implications. A theme emerges which appears to underlie many of the patterns that were isolated. This theme deals with the specific process of reintegration and graduated release; it also deals with the more general process of maintaining and/or reestablishing links between the offender and the general society to which he is to eventually return.

The Furlough Program may begin very early in the period of incarceration and this serves to maintain and strengthen links that existed before incarceration and provides an opportunity to establish new ties. Participation in pre-release centers and the broader process of movement from maximum to medium to minimum security levels also functions to gradually reintroduce the offender to the relative freedom in the community that they will experience upon release.

The wide use of work and education release programs in the pre-release centers, and to a lesser extent in the medium and minimum security level institutions, also plays an important reintegrative role. Individuals are allowed to work or attend classes in a normal societal setting; to earn wages, to pay taxes and retirement fees; and to pay room and board expenses. They are provided an opportunity to budget and save wages.

To those fully aware of the nature of traditional incarceration - the social system of the prison community, the informal inmate culture in the maximum security institution - the findings of this study should come as no surprise.

Traditionally, we take an offender out of our society and place him in another social system - the prison - that in no way constructively resembles the society to which he will eventually return. Family ties, heterosexual relationships, economic roles, and political participation is severed. In short, the individual enters the prison society and gradually loses touch with some of the most basic aspects of normal societal life. In prison, one is no longer expected to pay rent, to shop for and buy food; to pay taxes or contribute to a pension fund. One no longer has to budget a week's wage for

there are no bills to pay. Medical bills, utility bills, all bills in fact are paid by the taxpayers in the outside society. It is no wonder, then, that after a period of incarceration a tremendous shock is faced upon societal reentry.

The major findings of this study have shown that programs generally geared to maintain, establish or reestablish general societal links in terms of economic, political, and social roles have led to a reduction in recidivism. Additionally, it was found that when an individual has been gradually re-introduced to society the chances of recidivism lessen. The research demonstrates the effectiveness of the recent establishment of the community-based correctional apparatus in the state of Massachusetts. The Furlough Program, the Pre-Release Programs and Work and Education Release Programs have been isolated as effective mechanisms for reducing recidivism.

FOOTNOTES

1. A study has already been published by the Department which combined 1972 and 1973 releases from Pre-Release Centers, see: Daniel P. LeClair, An Analysis of Recidivism Among Residents Released From Boston State and Shirley Pre-Release Centers During 1972-1973. August, 1976.
2. Ibid.
3. In terms of statistical significance, the recidivism rate for MCI Concord was significantly higher ( $x^2 = 15.72$ ,  $P < .001$ , 1df) than the total releasee population; and the recidivism rates for MCI Norfolk and the Pre-Release Centers were significantly lower than the total releasee population ( $x^2 = 5.27$ ,  $P < .05$ , 1df, for MCI Norfolk) and ( $x^2 = 4.24$ ,  $P < .05$ , 1df, for Pre-Release Centers).
4. For previous recidivism studies by the Department of Correction, see: Callahan, Edward F., Statistical Tables Describing the Characteristics and Recidivism Rates of Men Released During 1966 from MCI's Norfolk, Walpole, Concord and the Massachusetts Forestry Camps, Massachusetts Department of Correction Publication No. 43 January 1, 1971; Graves David S., Analysis of Recidivism Among Men Released from MCI's Concord, Walpole, and Norfolk During 1966 (3 vols.), Massachusetts Department of Correction Publication, Numbers 54-56, August, 1972; LeClair, Daniel P. An Analysis of Recidivism Among Residents Released from Massachusetts Correctional Institutions During 1971, Massachusetts Department of Correction Research Publication #98, May, 1975; LeClair, Daniel P., An Analysis of Recidivism Among Residents Released from Massachusetts Correctional Institutions During the Year 1972, Massachusetts Department of Correction Publication No. 111, March, 1976.
5. See: LeClair, Daniel P. An Analysis of Recidivism Among Residents Released from Massachusetts Correctional Institutions During 1971, Massachusetts Department of Correction Research Publication #98, May, 1975.
6. Ibid.
7. See: Landolfi, Joseph, An Analysis of Differential Rates of Recidivism for MCI-Walpole Commitments by Institution of Release, Massachusetts Department of Correction Publication No. 114, May, 1976.

8. See: LeClair, Daniel P. An Analysis of Recidivism Among Residents' Released from Massachusetts Correctional Institutions During the Year 1972, Massachusetts Department of Correction Publication No.111, March, 1976.
9.  $\chi^2 = 10.05$ ,  $p < .01$ , 1df
10.  $\chi^2 = 6.30$ ,  $p < .05$ , 1df
11.  $\chi^2 = 6.07$ ,  $p < .05$ , 1df
12.  $\chi^2 = 10.16$ ,  $p < .01$ , 1df
13. When a chi square goodness of fit test was run on the expected vs. the actual recidivism rates for the population who received a furlough, the following resulted:  
 $\chi^2 = 24.09$ ,  $p < .001$ , 1df

APPENDIX I

VARIABLES

A. COMMITMENT VARIABLES

1. Institution of Original Commitment
2. Number of Jail Credits
3. Age at Commitment
4. Present Offense (most serious charge)
5. Number of Charges Involved in Present Offense
6. Type of Sentence
7. Minimum Sentence
8. Maximum Sentence

B. PERSONAL BACKGROUND CHARACTERISTICS VARIABLES

1. Race
2. Marital Status
3. Military Service
4. Last Civilian Address
5. Emergency Addressee
6. Occupational Field
7. Length of Employment at Most Skilled Position
8. Longest Time Employed at Any One Job
9. Type of Education
10. Last Grade Completed
11. History of Drug Use

C. CRIMINAL HISTORY VARIABLES

1. Age at First Arrest
2. Age at First Drunk Arrest
3. Age at First Drug Arrest
4. Total Number of Court Appearances
5. Number of Court Appearances for Person Offenses
6. Number of Court Appearances for Property Offenses
7. Number of Court Appearances for Sex Offenses
8. Number of Court Appearances for Narcotic Offenses
9. Number of Court Appearances for Drunkenness Offenses
10. Number of Court Appearances for Escape Offenses
11. Number of Juvenile Commitments
12. Number of House Of Correction Commitments
13. Number of Prior State or Federal Commitments
14. Number of Juvenile Paroles
15. Number of Adult Paroles
16. Number of Juvenile Parole Violations
17. Number of Adult Parole Violations
18. Age at Release

D. FURLOUGH VARIABLES

1. Total Number of Furloughs
2. Total Number of Successful Furlough Outcomes
3. Total Number of Late-Under Furloughs
4. Total Number of Late-Over Furloughs
5. Total Number of Escape Furlough Outcomes
6. Total Number of Arrest Furlough Outcomes
7. Specific Institution Granting Furlough
8. Months Served Before Receiving First Furlough
9. Months Served Before First Furlough Escape

E. RECIDIVISM VARIABLES

1. Category of Return
2. New Arrests
3. Types of Parole Violation
4. Disposition of New Arrests
5. Date Returned to Custody
6. Date Parole Warrant Issued



GLOSSARY OF TERMS

A. Commitment Variables

Most Serious Charge - Often an individual is committed for a number of different offenses or charges. In this table only the offense which received the longest prison sentence is presented.

Present Offense: Incidence of Various Charges - As opposed to Table A2, this table presents data regarding all offenses or charges involved in an individual's present commitment. If an individual is incarcerated for both Armed Robbery and B&E, the individual is included in each category. Thus the incidence total is greater than the number of individuals

A&B - Assault and Battery

D.W. - Dangerous Weapon

fem. - Female

f.u. - female under

w/child u. - with child under

B&E - Breaking and Entering

Com. & Notor. - Common and Notorious

Malic. Inj. - Malicious Injury

w/ND - Where Narcotic Drug

Induce Oth.to Vio. N.D. - Induce another to Violate Narcotic  
Drug Laws

w/int. - with intent

op. M.V. U/I N.D. - Operating a Motor Vehicle Under the Influence  
of a Narcotic Drug

Controlled Substance - a Substance (drug) whose manufacturing,  
dispensing or possession is controlled  
by statute

Class A - Includes Heroin, Cocaine

Class B - includes Methadone, Amphetamines

Class C - Includes Halucinogens

Other - includes a variety of offenses such as: Nonsupport, Polygamy, Gaming, Bribery, Contempt of Court, Abortion, Illegitimacy, Prostitution, Disturbing the Peace, and Motor Vehicle Offenses other than Larceny of a Motor Vehicle.

Number of Charges - The total number of charges involved in the present commitment. For example, if an individual is committed for Burglary, Arson and Assault, three charges are recorded. Charges should not be confused with courts. An individual may be committed on 16 counts for the single charge of Burglary.

Type of Sentence:

Simple - one sentence is being served

Concurrent - more than one sentence is being served (all served coterminous)

Aggregate - more than one sentence is being served but the sentences are added together and not served coterminous)

Forthwith - a sentence which supercedes an existing sentence

From and After - a sentence which began after an individual had been released from an existing sentence

Minimum Sentence

No Minimum - A sentence which has no minimum term specified. All Concord commitments have no minimum sentence. Most Framingham commitments have no minimum sentence.

B. Personal Background Characteristics Variables

Military Service Discharge

"DISCH." - Discharge

"GEN." - General

"DISCH. UNKNOWN" - Individuals who have served in the Armed Forces but whose type of discharge is unknown to Correctional authorities.

"Grade Equiv." - Grade Equivalency Diploma

"Spec. Ed." - Special Education Classes

"Inapplicable" - Individuals who were never in Special Education Classes or received a Grade Equivalency Diploma.

Occupational Field

Professional\* - (e.g., lawyers, doctors, engineers, clergy).

Business/Managerial - ownership of management of a business valued at \$10,000 or more.

Clerical/Sales - (e.g., sales managers, life insurance sales, bookkeeper, clerks).

Skilled Manual - (e.g., master tradesman, machinist, factory foreman).

Semi-Skilled Manual - (e.g., apprentice craftsman, automobile mechanic, assembly line).

Unskilled Manual - labor tasks requiring little training or skill.

Service - (e.g., bartender, waiter, taxi driver, janitor).

Not Applicable - An individual who has never been arrested for drunkenness.

Not Applicable - An individual who has never been arrested for a drug offense.

C. Criminal History Variables

Court Appearances - A court appearance is an arrest which results in the individuals appearing in court several times before a final disposition is reached. Thus court appearances in this study does not indicate the number of times an individual has been in a court but rather the number of times an individual has gone through the criminal justice process, from arrest to final disposition.

\* These categories were derived from a code scheme developed by Martin Hamburger, Teacher's College, Columbia University.

APPENDIX II

VARIABLES FOUND TO DIFFERENTIATE  
BETWEEN HIGH AND LOW RECIDIVISM  
RISK GROUPS

VARIABLE I: MARITAL STATUS

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
Married	189	25	214	12%
Not Married	582	160	742	22%
TOTAL	771	185	956	19%

Missing Observations = 10  
( $X^2=10.39$ ,  $p<.01$ , 1df)

VARIABLE II: MILITARY HISTORY

	NON-RECIDIVISTS	RECIDIVIST	TOTAL	RECIDIVISM RATE
No Military Service	576	156	732	21%
Military Service	192	26	218	12%
TOTAL	768	182	950	19%

Missing Observations = 16  
( $X^2=9.55$ ,  $p<.01$ , 1df)

VARIABLE III: EDUCATION; LAST GRADE COMPLETED

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
Ninth Grade or less	410	118	528	22%
Tenth Grade or more	351	62	413	15%
TOTAL	761	180	941	19%

Missing Observations = 25  
( $X^2=8.06$ ,  $p<.01$ , 1df)

VARIABLE IV: EMPLOYMENT; TIME AT MOST SKILLED POSITION

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
Less Than 12 Months	433	129	562	23%
More Than 12 Months	255	36	291	12%
TOTAL	688	165	853	19%

Missing Observations = 109  
( $X^2=13.76$ ,  $p<.001$ , 1df)

VARIABLE V: EMPLOYMENT: TIME AT JOB OF LONGEST DURATION

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
Less than 12 Months	400	126	526	24%
More than 12 Months	293	38	331	12%
TOTAL	693	164	857	19%

Missing Observations = 109  
( $X^2=20.43$ ,  $p < .001$ , 1df)

VARIABLE VI: KNOWN HISTORY OF DRUG USE

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
No history of Drug Use	394	62	456	17%
History of Drug Use	345	117	462	25%
TOTAL	739	179	918	19%

Missing Observations = 49  
( $X^2=20.11$ ,  $p < .001$ , 1df)

VARIABLE VII: TOTAL NUMBER OF COURT APPEARANCES

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
Five or less	214	27	241	11%
Six or More	564	158	722	22%
TOTAL	778	185	963	19%

Missing Observations = 3  
( $X^2=13.28$ ,  $p < .001$ , 1df)

VARIABLE VIII: NUMBER OF PRIOR COURT APPEARANCES FOR PROPERTY OFFENSES

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
One or None	234	23	257	9%
Two or More	545	163	708	23%
TOTAL	779	186	965	19%

Missing Observations = 1  
( $X^2=24.00$ ,  $p < .001$ , 1df)

VARIABLE IX: PRIOR INCARCERATION AS A JUVENILE

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
Not incarcerated	563	101	664	15%
One or More Incarceration	216	85	301	28%
TOTAL	779	186	965	19%

Missing Observations = 1  
( $X^2=22.59$ ,  $p < .001$ , 1df)

VARIABLE X: PRIOR STATE OR FEDERAL INCARCERATIONS

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
None	450	54	504	11%
One or More	329	132	461	29%
TOTAL	779	186	965	19%

Missing Observations = 1  
( $X^2=49.69$ ,  $p < .001$ , 1df)

VARIABLE XI: PRIOR INCARCERATION, JUVENILE OR ADULT

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
None	273	23	296	8%
One or More	506	163	669	24%
TOTAL	779	186	965	19%

Missing Observations = 1  
( $X^2=36.32$ ,  $p < .001$ , 1df)

VARIABLE XII: AGE AT INCARCERATION, PRESENT OFFENSE

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
18 or younger	130	55	187	29%
19 or older	645	131	774	17%
TOTAL	775	186	961	19%

Missing Observations = 5  
( $X^2=15.80$ ,  $p < .001$ , 1df)

VARIABLE XIII: AGE AT FIRST ARREST

	NON-RECIDIVIST	RECIDIVIST	TOTAL	RECIDIVISM RATE
17 or younger	444	134	578	23%
18 or more	332	51	383	13%
TOTAL	776	185	961	19%

Missing Observations = 5  
( $\chi^2=14.43$ ,  $p<.001$ , 1df)